

**PATENT APPLICATION**  
**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

|  |                                 |
|--|---------------------------------|
| In re application of   | Docket No: Q77191               |
| Koichi OHTO, et al.  | Allowed: February 9, 2007       |
| Appln. No.: 10/650,193   | Group Art Unit: 2826            |
| Confirmation No.: 6245   | Examiner: Alexander O. WILLIAMS |
| Filed: August 28, 2003   |                                 |
| For: SEMICONDUCTOR DEVICE HAVING SILICON-DIFFUSED METAL WIRING<br>LAYER AND ITS MANUFACTURING METHOD |                                 |

**INFORMATION DISCLOSURE STATEMENT**  
**UNDER 37 C.F.R. §§ 1.97 and 1.98**

**MAIL STOP ISSUE FEE**  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure under 37 C.F.R. § 1.56, Applicant hereby notifies the U.S. Patent and Trademark Office of the documents which are listed on the attached PTO/SB/08 A & B (modified) form and/or listed herein and which the Examiner may deem material to patentability of the claims of the above-identified application.

1. Japanese Patent Application Publication No. 2003-347299, published December 5, 2003, with English Abstract.
2. Japanese Patent Application Publication No. 2001-291720 published October 19, 2001, with English Abstract.
3. Japanese Patent Application Publication No. 2000-150517, published May 30, 2000, with English Abstract.
4. Japanese Patent Application Publication No. 2000-058544, published February 25, 2000, with English Abstract.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AW/

## INFORMATION DISCLOSURE STATEMENT

U.S. Appln. No.: 10/650,193

Q77191

5. Japanese Patent Application Publication No. 11-186273, published July 9, 1999, with English Abstract.
6. Japanese Patent Application Publication No. 06-177128, published June 24, 1994, with English Abstract.
7. Japanese Patent Application Publication No. 2000-349085, published December 15, 2000, with English Abstract.
8. Japanese Patent Application Publication No. 03-262125, published November 21, 1991, with English Abstract.
9. Japanese Patent Application Publication No. 11-204523, published July 30, 1999, with English Abstract.

One copy of each of the listed documents is submitted herewith.

The present Information Disclosure Statement is being filed after either a Final Office Action, Notice of Allowance, or an action that otherwise closes prosecution in the application (whichever is earlier), but before payment of the Issue Fee, and therefore Applicant is submitting herewith a the fee of \$180.00 via EFS payment screen under 37 C.F.R. § 1.17(p), and a Statement Under 37 C.F.R. § 1.97(e).

The present Information Disclosure Statement is being filed thirty days or fewer from the communication from a foreign patent office and a Statement Under 37 C.F.R. § 1.704(d) is attached.

In compliance with the concise explanation requirement under 37 C.F.R. § 1.98(a)(3) for foreign language documents, Applicant encloses here with a copy of a corresponding Japanese Office Action dated February 14, 2007, and an English translation of the pertinent portions thereof which cites such documents and indicates the degree of relevance found by the foreign office.

## INFORMATION DISCLOSURE STATEMENT

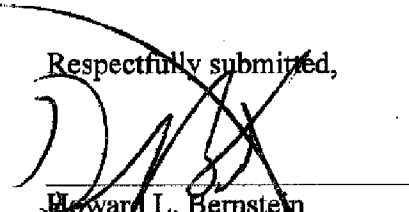
U.S. Appln. No.: 10/650,193

Q77191

The submission of the listed documents is not intended as an admission that any such document constitutes prior art against the claims of the present application. Applicant does not waive any right to take any action that would be appropriate to antedate or otherwise remove any listed document as a competent reference against the claims of the present application.

The statutory fee of \$ 180.00 is being charged to Deposit Account No. 19-4880 via EFS Payment Screen. The USPTO is also directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

  
Edward L. Bernstein  
Registration No. 25,665

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WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: March 14, 2007

**PATENT APPLICATION****IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of: Koichi OHTO, et al

Docket No: Q77191

Appln. No.: 10/650,193

Group Art Unit: 2826

Confirmation No.: 6245

Examiner: Alexander O. WILLIAMS

Filed: August 28, 2003

For: SEMICONDUCTOR DEVICE HAVING SILICON-DIFFUSED METAL WIRING  
LAYER AND ITS MANUFACTURING METHOD

**STATEMENT UNDER 37 C.F.R. § 1.704(d)**


Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

The undersigned hereby states, upon information and belief:

That each item of information contained in the Information Disclosure Statement filed concurrently herewith was cited in a communication from a foreign patent office in a counterpart foreign application, and that the communication was not received by any individual designated in 37 C.F.R. § 1.56(c) more than thirty days prior to the filing of said Information Disclosure Statement.

Respectfully submitted,

  
Howard L. Bernstein  
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LAYER AND ITS MANUFACTURING METHOD

**STATEMENT UNDER 37 C.F.R. § 1.97(e)**

Commissioner for Patents  
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Alexandria, VA 22313-1450

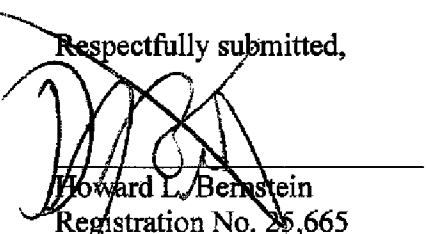
Sir:

The undersigned hereby states, upon information and belief:

That each item of information contained in the Information Disclosure Statement filed  
concurrently herewith was first cited in any communication from a foreign patent office in a  
counterpart foreign application not more than three months prior to the filing of said Information  
Disclosure Statement.

Respectfully submitted,

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Howard L. Bernstein  
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WASHINGTON OFFICE  
**23373**  
CUSTOMER NUMBER

Date: March 14, 2007

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AW/

MODIFIED PTO/SB/08 A &amp; B (08-03)

|  |   |    |   |                          |                       |
|--|---|----|---|--------------------------|-----------------------|
| Substitute for Form 1449 A & B/PTO<br><br><b>INFORMATION DISCLOSURE<br/>STATEMENT BY APPLICANT</b><br><br><i>(use as many sheets as necessary)</i> |   |    |   | <i>Complete if Known</i> |                       |
|  |   |    |   | Application Number       | 10/650,193            |
|  |   |    |   | Confirmation Number      | 6245                  |
|  |   |    |   | Filing Date              | August 28, 2003       |
|  |   |    |   | First Named Inventor     | Koichi OHTO           |
|  |   |    |   | Art Unit                 | 2826                  |
|  |   |    |   | Examiner Name            | Alexander O. WILLIAMS |
|  |   |    |   | Attorney Docket Number   | Q77191                |
| Sheet  | 1 | of | 1 |                          |                       |

| U.S. PATENT DOCUMENTS |                       |                 |                                      |                                |   |
|-----------------------|-----------------------|-----------------|--------------------------------------|--------------------------------|---|
| Examiner Initials*    | Cite No. <sup>1</sup> | Document Number |                                      | Publication Date<br>MM-DD-YYYY | Name of Patentee or Applicant of Cited Document |
|                       |                       | Number          | Kind Code <sup>2</sup><br>(if known) |                                |   |
|                       |                       | US              |                                      |                                |   |
|                       |                       | US              |                                      |                                |   |
|                       |                       | US              |                                      |                                |   |
|                       |                       | US              |                                      |                                |   |
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|                       |                       | US              |                                      |                                |   |
|                       |                       | US              |                                      |                                |   |
|                       |                       | US              |                                      |                                |   |

| FOREIGN PATENT DOCUMENTS |                       |                           |                     |                                      |                                |   |                          |
|--------------------------|-----------------------|---------------------------|---------------------|--------------------------------------|--------------------------------|---|--------------------------|
| Examiner Initials*       | Cite No. <sup>1</sup> | Foreign Patent Document   |                     |                                      | Publication Date<br>MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Translation <sup>4</sup> |
|                          |                       | Country Code <sup>3</sup> | Number <sup>4</sup> | Kind Code <sup>5</sup><br>(if known) |                                |   |                          |
|                          |                       | JP                        | 2003-347299         | A                                    | 12-15-2003                     | Renesas Technology Corp                         |                          |
|                          |                       | JP                        | 2001-291720         | A                                    | 10-19-2001                     | Hitachi Ltd.                                    |                          |
|                          |                       | JP                        | 2000-150517         | A                                    | 05-30-2000                     | Hitachi Ltd.                                    |                          |
|                          |                       | JP                        | 2000-058544         | A                                    | 02-25-2000                     | Matsushita Electron Corp                        |                          |
|                          |                       | JP                        | 11-186273           | A                                    | 07-09-1999                     | Ricoh Co Ltd                                    |                          |
|                          |                       | JP                        | 06-177128           | A                                    | 06-24-1994                     | Japan Energy Corp                               |                          |
|                          |                       | JP                        | 2000-349085         | A                                    | 12-15-2000                     | NEC Corp  |                          |
|                          |                       | JP                        | 03-262125           | A                                    | 11-21-1991                     | Mitsubishi Electric Corp                        |                          |
|                          |                       | JP                        | 11-204523           | A                                    | 07-30-1999                     |   |                          |
|                          |                       |                           |                     |                                      |                                |   |                          |
|                          |                       |                           |                     |                                      |                                |   |                          |
|                          |                       |                           |                     |                                      |                                |   |                          |

| NON PATENT LITERATURE DOCUMENTS |                       |  |                          |
|---------------------------------|-----------------------|--|--------------------------|
| Examiner Initials*              | Cite No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published. | Translation <sup>4</sup> |
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|                    |                                   |                 |            |
|--------------------|-----------------------------------|-----------------|------------|
| Examiner Signature | /Alexander Williams/ (04/15/2008) | Date Considered | 04/15/2008 |
|--------------------|-----------------------------------|-----------------|------------|

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kind Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov), MPEP 901.04 or follow the hyperlink from the title of the document to the intranet. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to indicate here if English language Translation is attached.

[Page 1 of 1]

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AW/